

## **CHAPTER 5 - Roadway Excavation- 02316**

### **General**

Roadway excavation is obtained from roadway cut sections, ditches and channels, and is used for constructing required embankments. When road-ex is used as fill; it falls under the section 02330 embankment.

If the road-ex quantity is greater than the embankment quantity then some of the material may be wasted, or if the material is unsuitable for embankment it may also be wasted. However if too much road-ex is wasted then the embankment quantity or borrow quantity could overrun.

Excavate all material within designated areas, to designed grade and elevation, including channels with a bottom width of 12.0 ft. or greater. Remove and dispose of excavated material in embankment and/or other areas.

Follow the minimum sampling and testing guide for sampling and testing frequencies.

### **Related Sections:**

00725: Scope of Work

00820: Legal Relations and Responsibility to Public

01355: Environmental Protection

01571: Temporary Environmental Controls

01721: Survey

02056: Common Fill

02061: Select Aggregate

02075: Geotextiles

02231: Site Clearing and Grubbing

02224: Dispose of Asphalt Pavement

02324: Compaction

02912: Topsoil

**Preparation:**

Assure that the clearing and grubbing operation has been completed according to standard specification 02231, and there is no organic material left, which could contaminate the road-ex if it is to be used for embankment.

Assure that the area to be excavated has been properly slope staked , so excavation limits are not exceeded.

Determine a method for estimating quantities of material being hauled each day.

The final quantity will be determined by comparing the original x-sections to the final x-sections.

Assure that disposal operations do not violate permit requirements or local ordinances. If some of the material will be left on the project assure that the material is properly broken down or processed and its placement does not jeopardize contract work or future work.

Review the plans, special provisions and Right of Way agreements to be aware of any restrictions of roadway excavation.

Observe the Contractor's operations to assure that the work is completed as specified.

Assure that the Contractor is aware of and does not violate, environmental restrictions, or private property.

Assure that the Contractor is aware of areas where the contract does not allow any disturbance.

Assure erosion and sediment control is in place or will be constructed and maintained according to the Erosion control plan.

Assure that proper traffic control is provided and dust is controlled.

Finish top of subgrade to +/- 0.1 ft.

**Documentation:**

Document all activities in the daily diary or ipaq, and record all quantities in a field book or ipaq.

<b>Roadway Excavation</b>
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SPEC	INSPECTION LEVEL	INSPECTION OBJECTIVE	INSPECTOR ACTIVITY
02316	Intermittent	<p>Ensure environmental controls in place prior to land-disturbing activity.</p> <p>Ensure roadway excavation operation confined to proposed cut limits.</p> <p>Ensure cut slopes are built according to plans.</p> <p>Ensure material meets specifications in section 02056 if used as fill.</p> <p>Ensure material is compacted to meet section 02324</p> <p>Ensure Contractor will use acceptable disposal methods and does not violate Federal or State laws.</p>	<p>Document all activities in Daily Diary.</p> <p>Document equipment</p> <p>Document station to station excavated.</p> <p>Document estimated quantities hauled each day.</p> <p>Verify slope stakes information and actual slopes</p> <p>Sample taken to lab and results verified.</p> <p>Compaction tests taken in the field.</p>

**ROADWAY EXCAVATION – Check List**

<b>Confirming</b>	<b>Attributes</b>
YES ( ) NO ( ) N/A ( )	Reviewed assigned functions and then reviewed the contract plans, specifications, and special provisions, noting all provisions applicable to the assigned responsibilities.
YES ( ) NO ( ) N/A ( )	Reviewed measure of payment on Roadway Excavation
YES ( ) NO ( ) N/A ( )	Reviewed Survey Stakes for Fills and Cut elevations.
YES ( ) NO ( ) N/A ( )	Reviewed field staking of assigned items and discusses any questions that may arise with the Field Engineer, or Resident Engineer.
YES ( ) NO ( ) N/A ( )	Reviewed documentation requirements and note keeping system for assigned items with Level IV Inspector, Field Office Technician, or Engineer.
YES ( ) NO ( ) N/A ( )	Inspector reviews safety requirements for the assigned work, reviews MUTCD, and any other safety manuals that may be pertinent and discusses any anticipated problems with the Level IV Inspector or Engineer.

Item # 5	ROADWAY EXCAVATION						Eng'r Party	Date Weather
STA	STA	LENGTH	WIDTH	AVE. WIDTH	DEPTH	Verified By		
54 + 00	54 + 50	50 ft.	10.0 ft.	12.5 ft.	0.80 ft.	DG	Ft <sup>3</sup>	
			15.0 ft.				500.00 ft. <sup>3</sup>	
56 + 80	57 + 05	25.0 ft.	20.0 ft.	16.75 ft.	1.5 ft.	DG	628.13 ft. <sup>3</sup>	
			13.5 ft.					
57 + 05	57 + 80	75 ft.	13.5 ft.	11.50 ft.	1.5 ft.	DG	1,293.75 ft. <sup>3</sup>	
			9.5 ft.					

**NOTES:**

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